2025中国医药BD交易趋势总结与分析

Trends and Analysis of China's Pharmaceutical Transactions in 2025

联合出品
Co-production

浩悦资本 HAOYUE CAPITAL

ideals.

总 述 Overview

交易生态成熟化，BD 成为出海主力通道

The Evolving Transaction Ecosystem, with BD as the Main Channel for International Expansion

近年来，中国医药跨境交易持续升温，呈现出四大关键趋势：License-out 持续主导、交易节奏加快、交易阶段不断前移、交易结构愈发复杂。MNC 在专利悬崖与现金充沛的背景下，持续加码对华 BD 合作，尤其偏好中国在肿瘤、代谢和免疫领域中具备 FIC 潜力、差异化机制、工程化特征的新一代资产。同时，在疾病领域选择、靶点结构创新与技术平台赋能等维度，中国 Biotech 也展现出更强的体系化“出海能力”，逐步摆脱对晚期资产与单一肿瘤赛道的依赖，跨境 BD 正成为中国创新药价值实现的核心出口。

In recent years, cross-border pharmaceutical transactions in China continued to heat up, presenting four key trends: sustained dominance of license-out deals, accelerated transaction pace, earlier transaction stages, and increasingly complex deal structures.

Against a backdrop of looming patent cliffs and robust cash reserves, multinational corporations (MNCs) are intensifying their business development (BD) collaborations within China. They show a marked preference for next-generation Chinese assets in oncology, metabolic diseases, and immunology that exhibit first-in-class (FIC) potential, differentiated mechanisms, and advanced engineering features. Concurrently, Chinese biotechs are demonstrating more systematic "go-global" capabilities across disease area selection, target structural innovation, and platform-driven discovery. By moving away from a reliance on late-stage assets and oncology-centric portfolios, cross-border BD has emerged as the primary vehicle for realizing the value of Chinese innovative drugs.

据专家在波士顿国际生物大会（BIO International Convention）及摩根大通全球医疗健康峰会（J.P.Morgan Healthcare Conference）上的实地观察：“中国企业国际顶级会议中的占比越来越大，已

接近 40%~50%，是 BD 交易中的大主力。”无论国际形势如何波动，MNC 对中国源头创新的底层需求逻辑依然坚挺。

According to on-site observations by experts at the BIO International Convention in Boston and the J.P. Morgan Healthcare Conference: "The proportion of Chinese companies at top international conferences is growing, now approaching 40% to 50%, making them one of the major forces in BD transactions." Regardless of fluctuations in the international environment, the underlying demand logic of MNCs for Chinese homegrown innovation remains solid.

与此同时，国内资本市场层面亦出现边际改善信号。随着 IPO 审核节奏阶段性放松及港股上市通道逐步修复，生物医药板块融资情绪在 2025 年明显回暖。数据显示，2025 年医疗健康领域投融资项目中，生物医药相关项目数量较 2024 年同比增长约 11%，高于行业整体水平，反映出市场对具备技术壁垒和国际化潜力资产的风险偏好正在修复。

Concurrently, the domestic capital market has also shown signs of marginal improvement. With the phased relaxation of the IPO review pace and the gradual recovery of the Hong Kong stock listing channel, financing sentiment in the biopharma sector rebounded significantly in 2025. Data shows that the number of biopharma-related projects in healthcare investment and financing in 2025 increased by approximately 11% year-on-year compared to 2024, which is higher than the overall industry level, reflecting a repairing risk appetite for assets with technological barriers and international potential.

从行业对比来看，医药板块在港股市场中的修复速度亦明显快于其他行业。2025 年医疗健康领域 H 股上市公司数量较 2024 年增长约 125%，而同期其他行业上市公司数量增幅约为 50%。尽管 A 股医药板块整体表现仍承压，但港股市场已率先体现出对医药资产中长期成长性的认可，为后续融资与交易活动提供了重要的流动性支撑。

From an industry comparison perspective, the recovery speed of the pharmaceutical sector in the Hong Kong stock market was also significantly faster than in other industries. The number of H-share listed companies in the healthcare sector in 2025 grew by about 125% compared to 2024, while the increase in listed companies in other sectors during the same period was about 50%.

Although the A-share pharmaceutical sector as a whole remains under pressure, the Hong Kong market has taken the lead in recognizing the long-term growth potential of pharmaceutical assets, providing crucial liquidity support for subsequent financing and transaction activities.

现象一 Phenomenon I

License-out 交易持续主导：数量、金额双升

License-out Transactions Continue to Dominate: Both Volume and Value Rise

License-out 交易在 2023 年达 80 笔，2024 年升至 110 笔，同比增长 38%。2025 年共新增 185 笔 License-out 交易，首付款累计约 71.53 亿美元，较去年同期显著增长。License-out 交易在过去三年始终保持 License-in2~3 倍的笔数和超过 8 倍的首付款总额，反映中国 Biotech 在全球管线补位中的不可替代性。值得注意的是，2025 年生物医药 BD 交易的首付款规模已超过同期 VC/PE 对创新药领域的累计投资额，进一步凸显 BD 在当前环境下已取代传统股权融资，成为创新药最核心的资金来源。

License-out transactions reached 80 in 2023, rose to 110 in 2024, a 38% year-on-year increase. In 2025, a total of 185 new license-out deals were added, with cumulative upfront payments of approximately $7.153 billion, a significant increase from the same period last year. Over the past three years, license-out transactions have consistently maintained 2-3 times the volume and over 8 times the total upfront payment value of license-in deals, reflecting the irreplaceable role of Chinese Biotech in supplementing global pipelines. Notably, the scale of upfront payments for biopharma BD transactions in 2025 has surpassed the cumulative venture capital (VC)/private equity (PE) investment in the innovative drug sector during the same period, further highlighting that BD has replaced traditional equity financing to become the most critical source of funding for innovative drugs in the current environment.

随着交易量的爆发，MNC 对项目的筛选标准已从**单纯的“看数据”延伸到了“看体系”**。国内创新药企常误以为仅凭亮眼的实验数据便足以打动买家，然而在 MNC 眼中，数据的呈现形式往往与其内容本身同等重要。

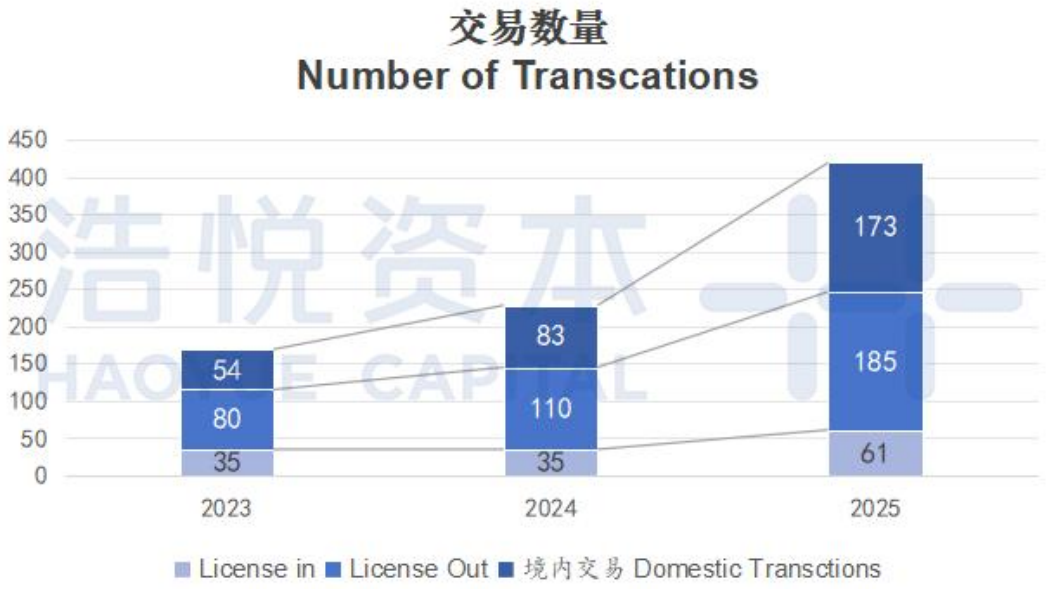
With the explosion in transaction volume, MNCs' project screening criteria have shifted from merely "looking at data" to "looking at the system." Domestic innovative drug companies often mistakenly believe that impressive experimental data alone is enough to impress buyers; however, in the eyes of MNCs, the presentation format of the data is often just as important as the content itself.

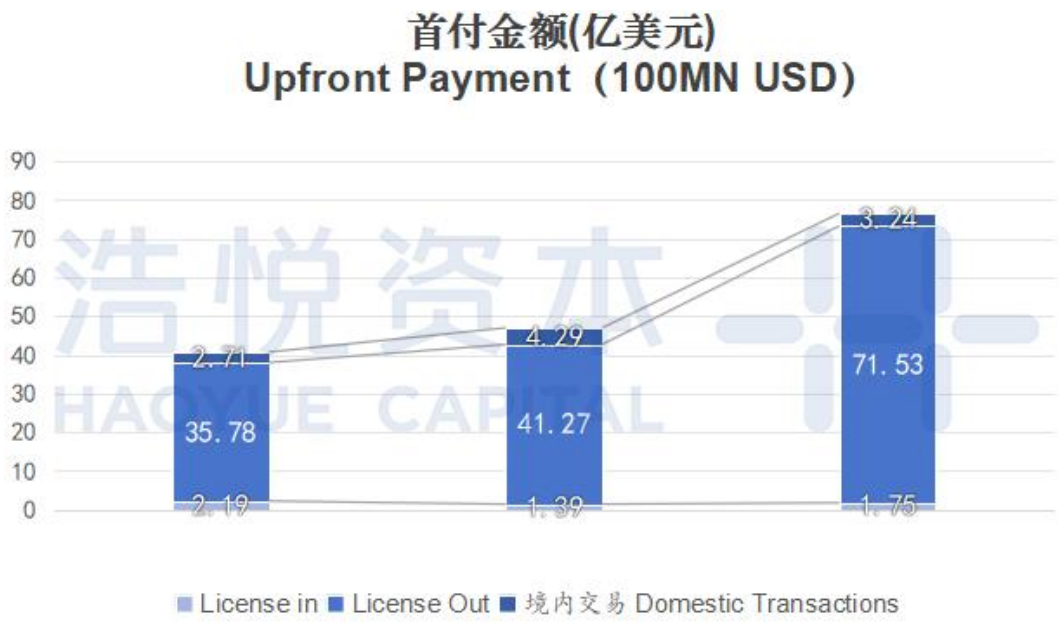
据行业专家访谈透露，MNC 买家普遍存在一种“准入心理”：如果潜在卖方未能通过专业数据室发出正式邀请，往往会被视为项目准备度不足，甚至不值得投入时间尽调。更严峻的是，随着 MNC 对合规要求的收紧，数据完整性已成为交易的“生死线”。2023 年，美国 FDA 向中国药企共发出 8 封警告信，其中75%的问题集中于数据完整性缺陷，包括审计追踪不完善、电子数据管理不规范等[1]。同时，仅有约 10%的中国药企成功通过 FDA 和 EMA 的 GMP 审计[2]。由此可见，若缺乏合规团队介入的数据留痕，交易极易在审查阶段被叫停。

According to expert interviews, MNC buyers generally have a "gatekeeping mentality": if a potential seller fails to issue a formal invitation through a professional data room, they are often considered to have insufficient project readiness, or even not worth the time for due diligence. More seriously, as MNCs tighten compliance requirements, data integrity has become the "life-or-death line" for transactions. In 2023, the US FDA issued a total of 8 warning letters to Chinese pharmaceutical companies, with 75% of the issues concentrating on data integrity defects, including incomplete audit trails and non-standard electronic data management [1]. Meanwhile, only about 10% of Chinese pharmaceutical companies successfully passed FDA and EMA GMP audits [2]. This shows that without the data traceability ensured by a compliance team, transactions can easily be halted during the review stage.

面对结构性的信任赤字，单纯依靠传统的邮件或网盘传输已无法满足合规要求，采用符合国际标准的专业数据室已成为进入MNC视野的“隐形入场券”。全球领先的虚拟数据室（VDR）解决方案提供商 ideals, 基于多年与市场主流MNC的合作经验，建立了使用符合MNC操作习惯且达到FDA 21 CFR Part 11标准的平台，支持企业进行结构化的文件管理，自动生成合规审计报告，确保数据完整、可追溯且符合国际标准[3]。此外，平台允许企业在提交管线资料时同步附上经权威专家（KOL）认证的评估报告和合规性预审信息，显著提高可信度。通过清晰、结构化的披露体系，帮助企业在接触初期便建立起宝贵的信任基石。

Facing this structural trust deficit, relying solely on traditional email or cloud storage file transfer is no longer sufficient for compliance. Adopting a professional data room that meets international standards has become the "invisible admission ticket" to enter the MNC's field of view. ideals, a global leading virtual data room (VDR) solution provider, based on years of cooperation with mainstream MNCs, has established a platform that aligns with MNC operating habits and meets the FDA 21 CFR Part 11 standard. It supports enterprises in structured file management, automatically generates compliance audit reports, and ensures data integrity, traceability, and compliance with international standards [3]. Furthermore, the platform allows companies to simultaneously attach assessment reports certified by Key Opinion Leaders (KOLs) and compliance pre-audit information when submitting pipeline materials, significantly increasing credibility. Through a clear and structured disclosure system, ideals helps companies establish a valuable foundation of trust at the initial contact stage.





现象二　Phenomenon II

交易结构更复杂：“现金+股权”混合结构兴起

More Complex Transaction Structures: The Rise of "Cash + Equity" Hybrid Structures

▸ 趋势概述 Trend Overview:

传统一次性现金支付模式被“现金+权益”所取代，NewCo、股权绑定、认股权证等模式使用比例达 20%。这类模式帮助买方前期锁定优质资产、后期参与估值增值，也让卖方实现阶段性变现和长期价值捕获。

The traditional one-time cash payment model is being replaced by "cash + equity," with models like NewCo, equity linkage, and warrants being used in 20% of deals. These models help the buyer secure high-quality assets early and participate in valuation appreciation later, while also allowing the seller to achieve phased monetization and long-term value capture.

恒瑞医药×Hercules（NewCo）的交易通过 1 亿美元首付+19.9%股权，绑定 GLP-1 三款早期资产；荣昌生物×VorBio 交易的 4500 万美元现金首付款+8000 万美元认股权证（折合 23%股权），展示已上市抗体资产的出海新范式。

The transaction between Henrui Medicine and Hercules (NewCo) used $100 million upfront + 19.9% equity to secure three early-stage GLP-1 assets; the transaction between RemeGen and VorBio, with $45 million in cash upfront payment + $80 million in warrants (equivalent to 23% equity), demonstrated a new paradigm for the global licensing of already-listed antibody assets.

交易结构的日益复杂化使得谈判从单一维度的估值博弈转向多维度的战略互探。在这一过程中，卖方常因信息不对称而陷入被动,既无法区分“路人甲”与“严肃买家”，导致资源在低意向客户身上错配,又因缺乏对买方核心关注的洞察，难以在谈判关键节点抛出精准筹码，从而错失博弈良机。根据 2023 年麦肯锡中国医药市场研究报告，在传统模式下，超过 50%的企业难以准确识别合作方真实兴趣，造成大量资源浪费和低效跟进[6]。

The increasing complexity of transaction structures has shifted negotiations from single-dimensional valuation games to multi-dimensional strategic probing. In this process, the seller often falls into a passive position due to information asymmetry, unable to distinguish between a "passerby" and a "serious buyer," leading to a mismatch of resources on low-intent customers. Furthermore, due to a lack of insight into the buyer's core concerns, they struggle to present precise bargaining chips at critical negotiation junctures, thus missing out on prime opportunities. According to the 2023 McKinsey China Pharma Market Study, in the traditional model, over 50% of companies find it difficult to accurately identify the partner's true interest, resulting in significant resource waste and inefficient follow-up [6].

要想打破这种信息不对称，虚拟数据室的作用就不能局限于静态存储，而必须升级为动态的战略情报工具。ideals 借助其强大的用户洞察功能，卖方能够获得上帝视角，精准透视买家的关注焦点。无论是通过分析买方团队在特定文件（如专利文档）上的停留时间来推断其顾虑，还是通过 Q&A 模块的提问逻辑反推其尽调深度，BD 团队均能据此制定“靶向谈判”策略。这种洞察力让卖方从被动的回答者转变为主动的引导者，确保每一分精力都投入到最有价值的博弈中[3]。

To overcome this information asymmetry, the role of virtual data rooms must evolve beyond static storage into dynamic strategic intelligence tools. Through ideals’ s powerful user insights capabilities, sellers gain a bird's-eye view to precisely pinpoint buyers' areas of focus. Whether by analyzing the time buyers spend on specific documents (such as patent filings) to infer their

concerns, or by reverse-engineering the depth of their due diligence through the logic of questions posed in the Q&A module, the BD team can formulate "targeted negotiation" strategies based on these insights. This intelligence transforms sellers from passive responders into proactive guides, ensuring every ounce of effort is invested in the most valuable negotiations[3].

现象三 Phenomenon Ⅲ

交易节奏明显加快：监管提速+数字尽调加持

Phenomenon 3: Significantly Accelerated Transaction Pace: Regulatory Speed-up + Digital Due Diligence

近年来，中国医药跨境交易节奏明显加快，源于监管提速与数字尽调工具普及的双重驱动：

- NMPA 临床试验审批周期从 60 天缩至 30 天，快速推进资产进入全球临床开发流程。
- 交易双方通过 VDR、AI 审阅等工具将尽调周期由 9~12 个月压缩至 2~6 个月。
- 代表交易周期：三生制药×辉瑞：交易从接触到签约仅用 6 个月；信达生物×罗氏：合作周期仅 2 个月，得益于双方数据集成与前期信任。

In recent years, the pace of China's cross-border pharmaceutical transactions has accelerated significantly, driven by the dual factors of regulatory speed-up and the popularization of digital due diligence tools:

- NMPA clinical trial approval cycle has been reduced from 60 days to 30 days, quickly advancing assets into the global clinical development process.
- The transaction parties are compressing the due diligence cycle from 9-12 months to 2-6 months through tools like VDR and AI review.

- Representative Transaction Cycles: 3SBio × Pfizer: the deal took only 6 months from contact to signing; Innovent Biologics × Roche: the cooperation cycle was only 2 months, thanks to mutual data integration and pre-existing trust.

根据行业观察，目前仍有许多企业的执行效率仍被“物理瓶颈”锁死。根据德勤 2024 年的研究，生物医药行业的 BD 尽调流程平均耗时 12-18 个月，其中约 65%的时间用于重复性文件处理和沟通协调，导致法律和人工成本高昂，交易效率降低[5]。更致命的是，面对 MNC 突如其来的资料需求，许多企业因准备不足，被迫叫停项目 1-2 个月进行内部资料重整。这种“进两步、退一步”的节奏，往往不仅消磨了买家的耐心，更可能让企业在关键的市场窗口期错失良机。

Industry observations indicate that many enterprises remain constrained by “physical bottlenecks” in operational efficiency. According to Deloitte's 2024 research, business development due diligence processes in the biopharmaceutical sector take an average of 12-18 months, with approximately 65% of that time spent on repetitive document processing and coordination efforts. This results in high legal and labor costs while reducing transaction efficiency[5]. More critically, when faced with sudden data requests from multinational corporations (MNCs), many companies—ill-prepared—are forced to halt projects for 1-2 months to reorganize internal materials. This “two steps forward, one step back” rhythm not only erodes buyer patience but also risks missing critical market windows.

为应对“倍速化”的竞争态势，头部 Biotech 企业正逐步放弃过去“项目制”的突击准备方式，转向“常态化”数据治理体系。以 ideals 数据平台为例，其支持资料实时更新与自动化通知，确保买卖双方信息实时同步，从根本上杜绝了因“发错版本、漏发文件”导致的重复沟通成本。根据实际客户反馈，使用 ideals 平台，通过提升准备度与响应速度，可将尽调周期从 12-18 个月缩短至 4-6 个月。在分秒必争的 BD 战场上，节省的每一天都直接转化为交易成功的更高概率。

To cope with the "accelerated" competitive landscape, leading Biotech companies are gradually moving away from the past "project-based" emergency preparation methods, shifting towards an "Always-on" data governance system. Taking the ideals data platform as an example, it supports real-time data updates and automated notifications, ensuring real-time information synchronization between buyers and sellers, fundamentally eliminating repetitive

communication costs caused by "sending the wrong version or missing files." According to actual customer feedback, using the ideals platform, by improving readiness and response speed, the due diligence cycle can be compressed from 12-18 months to 4-6 months. Practice shows that this model, by enhancing readiness and response speed, can compress the traditional 12–18 months due diligence cycle to 4-6 months. In the race-against-time BD battlefield, every day saved directly translates into a higher probability of a successful transaction.

现象四 Phenomenon IV

交易阶段前移，临床前资产受追捧

Transaction Stages Shift Earlier, Pre-clinical Assets Are Highly Sought After

2025 年第一季度中，约 80%的出海交易处于 IND-enabling 至 I 期阶段，显著高于 2023 年的 55%。在 2025 年第一季度的 Top10 交易中，有 6 项项目在临床前即获得全球权益授权，表明跨国药企愈发倾向于“前置卡位”以锁定潜力资产，特别是在代谢和免疫工程方向，FIC 属性、跨组织靶点尤受关注。

In the first quarter of 2025, approximately 80% of license-out deals were at the IND-enabling to Phase I stage, significantly higher than the 55% in 2023. Among the Top 10 transactions in Q1 2025, six projects secured global rights authorization at the pre-clinical stage, indicating that multinational pharmaceutical companies are increasingly inclined to "pre-position" to secure potential assets, especially in metabolic and immune engineering, where FIC attributes and cross-tissue targets are particularly favored.

从研发管线结构来看，中国创新药资源配置呈现出明显的集中趋势。2023~2025 年期间，肿瘤与罕见病领域在研管线数量始终位居前两位，构成创新药研发投入最为集中的核心方向；与此同时，免疫领域在研管线数量持续提升，逐步成为继肿瘤之后的重要增长方向。在研管线向高未满足临床需求及高价值疾病领域的集中，也为后续跨境 BD 交易在肿瘤、自免及代谢等方向的持续活跃奠定了基础。

From the perspective of R&D pipeline structure, China's innovative drug resource allocation exhibits a pronounced trend toward concentration. Between 2023 and 2025, oncology and rare diseases consistently ranked as the top two therapeutic areas in terms of pipeline volume,

forming the core focus of innovative drug R&D investment. Concurrently, the immunology pipeline has shown sustained growth, gradually emerging as a significant growth area following oncology. This concentration of pipelines toward areas with high unmet clinical needs and high-value diseases also lays the groundwork for sustained activity in cross-border business development (BD) transactions focused on oncology, autoimmune diseases, and metabolic disorders.

随着交易阶段向临床前早期前移，核心 Know-how 与未公开数据的保护成为交易安全的核心命题。普华永道报告显示，超过 60%的药企曾在尽调中遭遇数据泄露。对于早期项目而言，若在缺乏严密保护的机制下进行文件分享，一旦核心数据外泄，极易面临复制门槛低、知识产权受损的毁灭性打击。根据普华永道 2024 年发布的中国药企数据安全报告，超过 60%的医药企业在商业尽调过程中经历过数据泄露事件，导致重要研发信息被竞争对手利用[4]。例如，Cencora 在 2024 年 2 月遭网络攻击，影响了 27 家医药及生物公司，导致数千条患者相关数据被窃取。

As the transaction stage moves forward to early pre-clinical development, the protection of core Know-how and undisclosed data has become the central issue for transaction security. A PwC report showed that over 60% of pharmaceutical companies experienced data leakage during due diligence. For early-stage projects, if files are shared without a rigorous protection mechanism, core data leakage can easily lead to the devastating impact of low replication barriers and intellectual property damage. According to the 2024 China Pharma Data Security Report published by PwC, over 60% of pharmaceutical companies experienced data leakage incidents during commercial due diligence, leading to the use of important R&D information by competitors [4]. For example, Cencora suffered a cyberattack in February 2024, affecting 27 pharmaceutical and biotech companies and resulting in the theft of thousands of patient-related data records.

对于这类高度敏感的早期资产，市场亟需一种既能实现全球分享、又能保留绝对控制权的技术方案。这正是 ideals 银行级风控体系的核心价值所在——为脆弱的 Know-how 穿上一层数字装甲。借助防截屏、动态水印及精细化的分级权限控制，平台确保了敏感数据在跨境交互中“只能看、带不走” ，尤其在数据本

地化要求趋严背景下，支持境内节点部署的 VDR 成为刚需。这种极致的安全保障赋予了卖方在早期阶段即与 MNC 深入交换核心数据的底气，使其敢于在保障资产安全的前提下，加速推进早期资产的商业化变现。

For these highly sensitive early-stage assets, the market urgently needs a technical solution that can achieve global sharing while retaining absolute control. This is the core value of the ideals bank-grade risk control system—providing a layer of digital armor for vulnerable Know-how. Through features like anti-screenshot, dynamic watermarking, and fine-grained tiered permission control, the platform ensures that sensitive data in cross-border interaction is "view-only and cannot be taken," especially given the tightening requirements for data localization, where VDR support for domestic node deployment becomes a necessity. This ultimate security guarantee gives sellers the confidence to deeply exchange core data with MNCs at an early stage, enabling them to accelerate the commercialization of early-stage assets while ensuring their security.

BD 交易趋势 BD Transaction Trends

趋势一 Trend I

疾病领域多元化，代谢与自免崛起

Diversification Across Disease Areas, with the Rise of Metabolic and Immunology

疾病领域的趋势在一定程度反应中国企业开始摆脱“肿瘤依赖”，呈现多样化：

- 肿瘤 License-out 比例从 2023 年 68%降至 2024 年 64%，2025 年为 44.15%；
- 自免类年均 CAGR 达 51%，双抗/多抗结构超 60%；
- 代谢 License-out 占比由 2022 年的 2%升至 2024 年 13%

Trends across disease areas reflect, to some extent, that Chinese companies are gradually moving away from an overreliance on oncology, with a more diversified portfolio emerging:

- The share of oncology-related license-out transactions declined from 68% in 2023 to 64% in 2024, and further to 44.15% in 2025;
- Autoimmune programs recorded an average annual CAGR of 51%, with bispecific and multi-specific formats accounting for more than 60%;
- The proportion of metabolic-related license-out transactions increased from 2% in 2022 to 13% in 2024.

▶ 自免项目交易量激增，主要得益于罕见病政策与医保覆盖的双重驱动

The surge in autoimmune-related transactions has been primarily driven by the dual tailwinds of rare disease policies and expanded reimbursement coverage

自免交易数量从 2021 年约 8 项增长至 2024 年 27 项，三年增长约 3.4 倍。

系统性红斑狼疮、多发性硬化、重症肌无力等自免核心病种被纳入《罕见病目录》，享有优先审评、医保谈判优先等政策便利，增强项目的市场接受度与估值弹性。

医保支付能力持续提升，乌司奴单抗、依奇珠单抗等重磅药物已进入国家医保。

The number of autoimmune disease-related deals increased from 8 in 2021 to 27 in 2024, representing a roughly 3.4-fold growth over three years. Core autoimmune indications such as systemic lupus erythematosus, multiple sclerosis, and myasthenia gravis have been included in China's Rare Disease Catalog. This inclusion grants them policy advantages like priority review and priority negotiation for national reimbursement, thereby enhancing the market acceptance and valuation flexibility of related projects. Meanwhile, the capacity of national health insurance coverage continues to improve, with blockbuster drugs like ustekinumab and ixekizumab already being included in the national reimbursement drug list.

▶ 代谢领域（以 GLP-1 为核心）交易量爆发，适应症拓展+支付能力是关键

Transaction activity in the metabolic space (centered on GLP-1) has surged, driven by indication expansion and improving reimbursement capacity

2022–2024 年间，GLP-1 相关 License-out 交易从 4 项增长至 12 项，三年增长 200%。推动增涨的因素在于：

GLP-1 类药物逐步摆脱“糖尿病标签”，适应症拓展至肥胖、心血管疾病、CKD 等慢病领域，形成平台化潜力并吸引长期主义资本关注。

医保与商业支付体系加速覆盖，司美格鲁肽、替尔泊肽等核心产品已进入国家医保，2024 年起部分高端商业健康险也将其纳入报销范围，进一步强化了其市场放量预期与估值基础。

Between 2022 and 2024, the number of GLP-1-related license-out transactions increased from four to 12, representing a 200% growth over three years. This expansion has been driven by several factors. GLP-1 therapies have gradually moved beyond a “diabetes-only” positioning, with indications extending into obesity, cardiovascular disease, chronic kidney disease(CKD), and other chronic conditions, thereby creating platform-like potential and attracting long-term, patient capital.

At the same time, coverage by both public and commercial reimbursement systems has expanded. Key products such as semaglutide and tirzepatide have been included in the NRDL, and since 2024, certain high-end commercial health insurance plans have also begun to provide reimbursement, further reinforcing expectations for volume expansion and valuation support.

趋势二 Trend II

靶点结构创新：FIC 靶点主导高估值交易

Target and Structural Innovation, with FIC Targets Driving High-Valuation Transactions

FIC 相关 License-out 项目由 2022 年的 6 项增长至 2024 年的 18 项，2025 年有望超过 25 项，占比超过三分之一。2023 年底，百利天恒以其自研 FIC 双抗 ADC 项目与 BMS 达成合作，总规模高达 84 亿美元，刷新国产创新药出海记录，显示了结构差异+靶点稀缺双重驱动下的估值放大效应。

The number of FIC-related license-out projects increased from six in 2022 to 18 in 2024 and is expected to exceed 25 in 2025, accounting for more than one-third of total transactions. At the end of 2023, Biotheus entered into a collaboration with Bristol Myers Squibb (BMS) for its self-developed FIC bispecific ADC(antibody-drug conjugate), with a total deal value of up to USD 8.4 billion, setting a new record for the global out-licensing of China-origin innovative drugs and highlighting the valuation amplification effect driven by a combination of structural differentiation and target scarcity.

PD-1/EGFR/HER2 等成熟靶点占比由 2022 年的 40%下降至 2024 年的<20%；估值也从“临床数据驱动”逐步转向“靶点稀缺性+早期结构潜力”的综合能力导向，强调企业能否持续输出具备工程成熟度与估值潜力的多元管线。

The share of mature targets such as PD-1, EGFR, and HER2 declined from 40% in 2022 to less than 20% in 2024. Valuation paradigms have accordingly shifted from being primarily “clinical data-driven “toward a more integrated assessment centered on “target scarcity and early-stage structural potential,” placing greater emphasis on a company’s ability to continuously generate diversified pipelines with engineering maturity and valuation upside.

在具体热点上，ROR1、DLL3、CDH17 等差异化 FIC 靶点已成为市场追捧的焦点。以 ROR1 为例，全球已有 10 余条管线进入中前期开发阶段，默沙东的 Zilovertamab vedotin 已推进至Ⅲ期，成药性路径明确。信达和罗氏以 DLL3-ADC 的交易，凭借在小细胞肺癌适应症上的差异化优势与结构成熟度，达成 10 亿美元总额授权；石药 SYS6005（ROR1-ADC）：IND 次年即以 12.4 亿美元授权 Radiance Biopharma。

In terms of specific hotspots, differentiated FIC targets such as ROR1, DLL3, and CDH17 have become focal points of market interest. Taking ROR1 as an example, more than 10 global pipelines have entered early- to-mid stage development, with Merck’s zilovertamab vedotin having advanced to Phase III, demonstrating a clearly defined druggability pathway. The

Innovent×Roche DLL3-ADC transaction, leveraging differentiated advantages and structural maturity in small cell lung cancer indications, achieved a total deal value of USD 1.0 billion, while CSPC’ s SYS6005 (ROR1-ADC) was out-licensed to Radiance for USD 1.24 billion in the year following IND submission.

趋势三 Trend III

ADC 持续高热，双抗 ADC 打开结构溢价空间

Sustained Momentum in ADCs, with Bispecific ADCs Unlocking Structural Premiums

ADC 项目在 License-out 中占比持续提升，估值显著高于传统抗体药物；

The share of ADC programs in license-out transactions has continued to increase, with valuations significantly exceeding those of traditional antibody therapeutics.

在 2023 年的 Top30 交易中，ADC 项目数量达 11 项，占比高达 37%；2024 年 Top10 重磅交易中，ADC 项目数量占比近 50%，显示出对跨国药企的持续吸引力。

Among the Top 30 transactions in 2023, ADC programs accounted for 11 deals, representing 37% of the total; in 2024, ADCs comprised nearly 50% of the Top 10 landmark transactions, underscoring their sustained attractiveness to multinational pharmaceutical companies.

靶点叠加与结构复杂度成核心议价点：ADC 项目因靶向准确性高、毒副反应低、具备 CMC 壁垒平台以及可复制性等优势，具备早期即获取高溢价的能力。交易逻辑也从“谁先拿到 HER2”转向“交叉靶点+组合结构设计+早期布局”。

Target combination and structural complexity have become the primary value drivers: ADC programs command high premiums even at early stages due to their superior targeting accuracy, lower toxicity, established CMC barrier platforms(Chemistry, Manufacturing, and Controls), and high scalability. Deal logic has correspondingly shifted from a race to secure single established

targets such as HER2 toward strategies centered on cross-target combinations, complex structural design, and early-stage positioning.

百奥赛图与 IDEAYA Biosciences 达成的 4.065 亿美元合作，以 B7H3×PTK7 为靶点、拓扑异构酶为效载荷的双抗 ADC 为代表，充分体现了结构复杂度与差异性对交易估值的放大效应。此类组合提高肿瘤特异性，拓展临床适应症边界，具备极高转化潜力。

The USD 406.5 million collaboration between Biocytogen and IDEAYA Biosciences exemplifies this trend, featuring a bispecific ADC targeting B7H3×PTK7 with a topoisomerase payload. This transaction highlights the valuation amplification effect driven by structural complexity and differentiation, as such combinations enhance tumor specificity, expand the boundaries of clinical indications, and demonstrate substantial translational potential.

Top 10 BD 交易 Top 10 BD Transactions

从交易主体分布来看，中国企业在全球医药 BD 市场中的地位进一步巩固。2025 年披露的金额规模最大的 Top10 生物医药 BD 交易中，有 7 笔交易的核心资产来自中国企业，显示中国创新药已成为全球大型药企进行管线补位和技术布局的关键来源。以下聚焦 2025 年中国企业主导 Top10 BD 交易。

From the perspective of deal sponsor distribution, the position of Chinese companies in the global pharmaceutical BD market has further strengthened. Among the Top 10 biopharmaceutical BD transactions by disclosed deal value in 2025, seven involved core assets originating from Chinese companies, underscoring that China’s innovative drugs have become a key source for global pharmaceutical companies seeking pipeline replenishment and strategic technology deployment. The following section focuses on the Top 10 BD transactions led by Chinese companies in 2025.

▶1.恒瑞医药×GSK｜HRS-9821（PDE3/4 抑制剂，临床前/Ⅰ期）

Hengrui Pharma×GSK | HRS-9821 (PDE3/4 Inhibitor, Preclinical / Phase I)

恒瑞于 2025 年 7 月向 GSK 授权 HRS-9821 及 11 个候选项目，合作总金额最高 125 亿美元，其中 5 亿美元首付款、其余为分阶段开发/注册/商业化里程碑；GSK 另获全球（不含中国大陆）独家选择权并承担后续研发费用。HRS-9821 为 PDE3/4 双抑制剂，已完成早期临床前研究并在 COPD 模型中验证支气管扩张及抗炎作用，支持向干粉吸入器（DPI）剂型推进。11 个项目覆盖肿瘤、呼吸、自免等管线，均处临床前至Ⅰ期。该交易刷新恒瑞授权金额纪录，并**成为 2025 年度中国小分子出海金额最高的 license-out。**

In July 2025, Hengrui granted GSK a license for HRS-9821 along with 11 additional candidate programs, with a total deal value of up to USD 12.5 billion, including a USD 500 million upfront payment and the remainder payable as staged development, regulatory, and commercialization milestones. GSK obtained exclusive global options (excluding mainland China) and will assume responsibility for subsequent R&D costs. HRS-9821 is a dual PDE3/4 inhibitor that has completed early preclinical studies and demonstrated bronchodilatory and anti-inflammatory effects in COPD models, supporting advancement toward a dry powder inhaler (DPI) formulation. The 11 programs span oncology, respiratory, and autoimmune pipelines, all at preclinical to Phase I stages. This transaction set a new record for Hengrui's out-licensing deal size and represents the largest license-out by deal value for China-origin small molecules in 2025.

▶2. 信达生物×武田｜IBI363/IBI343/IBI3001（IO×ADC 组合授权，Ⅲ期/Ⅰ期）

Innovent Biologics×Takeda | IBI363 / IBI343 / IBI3001 (IO × ADC Combination License, Phase III / Phase I)

2025 年 10 月，信达与武田达成最高 114 亿美元的全球合作，涵盖 IBI363（PD-1/IL-2 融合蛋白，Ⅲ期）、IBI343（CLDN18.2-ADC，Ⅲ期）与 IBI3001（EGFR/B7-H3-ADC，Ⅰ期）三项资产。武田支付 12 亿美元首付款，其中包含 1 亿美元战略投资；其余为开发与销售里程碑，IBI3001 另附全球独家选择权。交易授予武田除大中华区外的独家商业化权益，并按产品分别共享 40/60 或支付 mid-teen 的销售分成。IBI363 已在超 1,200 名患者中取得稳定疗效，IBI343 获中美突破性疗法资格。**本次合作为 2025 年度中国 IO+ADC 最大规模 BD 交易。**

In October 2025, Innovent and Takeda entered into a global collaboration with a total deal value of up to USD 11.4 billion, covering three assets: IBI363 (PD-1/IL-2 fusion protein, Phase III), IBI343 (CLDN18.2-ADC, Phase III), and IBI3001 (EGFR/B7-H3-ADC, Phase I). Takeda paid a USD 1.2 billion upfront payment, including a USD 100 million strategic equity investment, with the remainder payable as development and sales milestones; IBI3001 is subject to an additional global exclusive option. The transaction grants Takeda exclusive commercialization rights outside Greater China, with either a 40/60 profit-sharing arrangement or mid-teen royalties on a product-by-product basis. IBI363 has demonstrated consistent efficacy in more than 1,200 patients, while IBI343 has received Breakthrough Therapy Designation in both China and the United States. **This collaboration represents the largest IO + ADC BD transaction involving a Chinese company in 2025.**

▶3. 三生制药×辉瑞｜SSGJ-707（PD-1×VEGF 双抗，Ⅰ/Ⅱ期）

3SBio×Pfizer | SSGJ-707(PD-1×VEGF Bispecific Antibody, Phase I/II)

作为中国双抗赛道首个突破 10 亿美元首付款的案例，这笔 60 亿美元大单不仅让辉瑞在 PD-1×VEGF 竞速中实现“后发高举”，也为本土高壁垒项目定下新的估值天花板。2025 年 5 月 19 日，辉瑞以 12.5 亿美元首付、潜在 48 亿美元里程碑取得中国以外全球权益，并追加约 1 亿美元战略入股三生；三生保留中国开发与分成权。依托辉瑞全球 I 期“篮子”网络，SSGJ-707 有望加速国际注册，并反哺三生后续在华 BT/BLA 申报。

As the first deal in China’s bispecific antibody space to surpass a USD 1.0 billion upfront payment, this USD 6.0 billion transaction not only enabled Pfizer to make a late but decisive entry into the PD-1×VEGF race, but also established a new valuation ceiling for high-barrier domestic assets. On May 19, 2025, Pfizer paid a USD 1.25 billion upfront payment and committed up to USD 4.8 billion in milestones to obtain global rights outside China, while additionally making an approximately USD 100 million strategic equity investment in 3SBio. 3SBio retained development and profit-sharing rights in China. Leveraging Pfizer’s global Phase I “basket trial” network, SSGJ-707 is expected to accelerate international registration and, in turn, support subsequent BT/BLA filings in China.

▶4. 晶泰科技×DoveTree｜AI+机器人药物发现合作（多靶点小分子/抗体）

XtalPi×DoveTree | AI + Robotics Drug Discovery Collaboration (Multi-target Small Molecules / Antibodies)

2025 年 6 月，晶泰与 DoveTree 签订合作意向书，双方围绕肿瘤、自免及神经疾病多靶点项目展开 AI 药物发现合作。合作结构包含两笔首付款：在最终协议签署后 10 日内支付 5100 万美元、180 日内支付 4900 万美元；晶泰还将有资格获得累计数十亿美元的开发与销售里程碑，以及基于年度净销售额的多位数分成。DoveTree 将获得全球范围的独家开发与商业化权，晶泰提供其“AI+机器人”智能实验平台与小分子/抗体设计能力，用于生成新一代候选药物。本次合作为晶泰在 AI 药物发现领域单笔金额最高的海外项目之一。

In June 2025, XtalPi and DoveTree entered into a memorandum of understanding to collaborate on AI-enabled drug discovery across multi-target programs in oncology, autoimmune, and neurological diseases. The collaboration structure includes two upfront payments: USD 51 million payable within 10 days of definitive agreement execution and USD 49 million payable within 180 days. XtalPi is also eligible to receive cumulative development and sales milestones totaling several billion US dollars, as well as multi-digit royalties based on annual net sales. DoveTree will obtain exclusive global development and commercialization rights, while XtalPi will contribute its “AI+robotics”intelligent laboratory platform and small-molecule/antibody design capabilities to generate next-generation drug candidates. This transaction represents one of XtalPi’ s largest single overseas projects in the AI-driven drug discovery space.

▶5.舶望制药×诺华｜siRNA 心血管创新药合作（临床前）

Argo Biopharma×Novartis | siRNA Cardiovascular Innovation Collaboration (Preclinical)

2025 年 9 月 3 日，船望制药与诺华达成战略合作，重点布局 ANGPTL3 联合用药及多项心血管 siRNA 产品。诺华将获得舶望处于 IND 支持研究阶段 siRNA 分子的中国外权益，并拥有 BW-00112（ANGPTL3）产品的优先谈判权。舶望将获得 1.6 亿美元预付款，并有资格获取最高 52 亿美元的开发、临床及商业化里程碑付款，以及销售分级特许权使用费。合作覆盖多地区临床推进，进一步强化舶望在心血管代谢 siRNA 领域的全球化布局。

On September 3, 2025, Argo Biopharma and Novartis entered into a strategic collaboration focused on ANGPTL3 combination therapies and multiple cardiovascular siRNA programs. Novartis obtained ex-China rights to Argo’ s siRNA molecules at the IND-enabling stage and secured a right of first negotiation for BW-00112 (ANGPTL3). Argo received a USD 160 million upfront payment and is eligible for up to USD 5.2 billion in development, clinical, and commercialization milestones, as well as tiered sales royalties. The collaboration supports multi-regional clinical development and further strengthens Argo’ s global positioning in the cardiovascular and metabolic RNAi space.

▸ 6. 石药集团×AstraZeneca｜AI-驱动小分子平台+口服免疫候选（早研）

CSPC × AstraZeneca | AI-Driven Small-Molecule Platform + Oral Immunology Candidates (Early Research)

首宗 50 亿美元量级的“AI 平台服务+管线输出”混合交易，宣告本土算法能力本身已可折算为 NPV 中的硬价值，并让 AZ 一次性补齐慢病口服小分子储备。2025 年 6 月 13 日，AZ 先付 1.1 亿美元首付款，承诺最高 52.2 亿美元开发-销售里程碑（总额 53.3 亿美元），引入石药双引擎 3D-QSPR 与主动学习平台，在 18 个月内完成 hit-to-lead 与 IND 封装；石药保留算法主导权及单数位百分比销售提成，完成传统化药向数字赋能型平台的价值跃迁。

As **the first “AI platform services + pipeline output” hybrid transaction at the USD 5.0 billion scale,** this deal signaled that proprietary algorithmic capabilities can be directly translated into hard NPV value and enabled AstraZeneca to rapidly strengthen its oral small-molecule portfolio in chronic diseases. On June 13, 2025, AstraZeneca paid a USD 110 million upfront payment and committed up to USD 5.22 billion in development and sales milestones (totaling USD 5.33 billion), gaining access to CSPC’ s dual-engine 3D-QSPR and active learning platforms to complete hit-to-lead optimization and IND packages within 18 months. CSPC retained control over its algorithms and is entitled to single-digit percentage royalties, marking a value transition from traditional chemical drugs to a digitally empowered platform model.

▸7. 和铂医药×阿斯利康｜多特异性抗体平台合作（临床前）

Harbour BioMed×AstraZeneca | Multispecific Antibody Platform Collaboration (Preclinical)

2025 年 3 月 21 日，和铂医药宣布与阿斯利康达成全球战略合作，围绕 Harbour Mice 全人源抗体平台共同开发新一代多特异性抗体疗法。阿斯利康将获得两项临床前免疫学项目的全球许可与选择权，并可推进相关候选物进入临床。和铂将获得总计 1.75 亿美元首付款，以及最高 44 亿美元研发及商业化里程碑付款，另享未来净销售额的分级特许权使用费。此外，阿斯利康将认购和铂 9.15%新发行股份，双方合作范围未来五年可扩展至更多管线。

On March 21, 2025, Harbour BioMed announced a global strategic collaboration with AstraZeneca to co-develop next-generation multispecific antibody therapies based on the Harbour Mice® fully human antibody platform. AstraZeneca obtained global licenses and options for two preclinical immunology programs, with the ability to advance selected candidates into clinical development. Harbour BioMed will receive total upfront payments of USD 175 million and is eligible for up to USD 4.4 billion in R&D and commercialization milestones, along with tiered royalties on future net sales. In addition, AstraZeneca will subscribe to newly issued shares representing a 9.15% equity stake in Harbour BioMed, with the scope of collaboration expandable to additional programs over the next five years.

▸ 8. 荣昌生物×VorBio｜Telitacicept / RC-18（BLyS/APRIL 双靶融合蛋白，全球Ⅲ期）

RemeGen×Vor Bio | Telitacicept / RC-18 (BLyS/APRIL Dual-Target Fusion Protein, Global Phase III)

已上市大分子**首次采用“高比例股权+现金”结构输出全球权**，为商业化阶段抗体海外授权树立股权-现金双轮驱动新范式。2025 年 6 月 26 日，VorBio 以 4500 万美元现金首付+8000 万美元零行权价认股权证（折合荣昌约 23%持股），并设 41.05 亿美元分阶里程碑与阶梯版税；同期完成 1.75 亿美元 PIPE，用于 gMG 全球Ⅲ期。认股权证放大荣昌长期市值杠杆，RA Capital 的扁平决策及 4 万例真实世界安全数据有望把海外临床启动压缩至半年内，释放“现金流+股权增值”双曲线回报。

For **the first time, a commercial-stage biologic asset adopted a "high-proportion equity+cash" structure to out-license global rights**, establishing a new dual-engine model combining equity and cash for overseas licensing of marketed antibodies. On June 26, 2025, Vor Bio paid a USD 45 million cash upfront payment and issued USD 80 million in zero-exercise-price warrants (equivalent to approximately a 23% equity stake in RemeGen), with an additional USD 4.105 billion in staged milestones and tiered royalties. Concurrently, a USD 175 million PIPE financing was completed to support global Phase III development in gMG. The warrant structure enhances RemeGen's long-term equity leverage, while RA Capital's streamlined decision-making process and a real-world safety dataset of over 40,000 cases are expected to compress overseas clinical initiation timelines to within six months, unlocking a dual-track return profile of "cash flow+equity appreciation."

▸9. 元思生肽×阿斯利康｜Synova 大环肽平台（多靶点大环肽，早研）

Synnovator×AstraZeneca | Synova™ Macrocyclic Peptide Platform (Multi-target Macrocyclic Peptides, Early Research)

2025 年 3 月 21 日，元思生肽与阿斯利康达成全球战略合作，围绕 Synova 智能化高通量大环肽药物研发平台共同推进自身免疫、代谢及慢性炎症等疾病的创新药发现。根据协议，阿斯利康将支付 7,500 万美元首付款及近期里程碑付款，总金额最高 3.4 亿美元，并基于全球销售额向元思生肽支付分级特许权使用费。此外，阿斯利康将对元思生肽进行股权投资，双方并计划在北京建立联合研发中心，以加速多靶点大环肽药物的全球化布局。

On March 21, 2025, Synnovator and AstraZeneca entered into a global strategic collaboration centered on the Synova™ intelligent high-throughput macrocyclic peptide discovery platform to advance innovative drug discovery in autoimmune, metabolic, and chronic inflammatory diseases. Under the agreement, AstraZeneca will pay a USD 75 million upfront payment and near-term milestone payments, with total deal value of up to USD 340 million, and will pay tiered royalties to Synnovator based on global sales. In addition, AstraZeneca will make an equity investment in Synnovator, and the parties plan to establish a joint R&D center in Beijing to accelerate the global development of multi-target macrocyclic peptide therapeutics.

▸10. 诺诚健华×Zenas BioPharma｜Orelabrutinib / ZB021 / ZB022（BTK/IL-17/TYK2，小分子，自身免疫性疾病）

InnoCare Pharma×Zenas BioPharma | Orelabrutinib / ZB021 / ZB022 (BTK / IL-17 / TYK2, Small Molecules, Autoimmune)

诺诚健华于 2025 年 10 月与 Zenas BioPharma 达成许可协议，授予其 Orelabrutinib（BTK 抑制剂）、ZB021（IL-17A/A-F 抑制剂）及 ZB022（TYK2 抑制剂）在**约定区域内的独家开发、生产及商业化权利**，交易总金额最高约 20.95 亿美元，包括 3,500 万美元首付款及多项开发、注册和商业化里程碑付款，并附分级销售提成。Orelabrutinib 已进入多发性硬化（MS）全球Ⅲ期临床阶段，ZB021 与 ZB022 处于临床前阶段，三项资产覆盖 BTK、IL-17 与 TYK2 等自免核心靶点。本次交易以成熟资产带动早期管线的组合式授权，实现自免领域多靶点整体输出，体现中国 Biotech 在慢性自免疾病管线布局上的系统化能力。

In October 2025, InnoCare Pharma entered into a license agreement with Zenas BioPharma, granting exclusive rights to develop, manufacture, and commercialize Orelabrutinib (BTK inhibitor), ZB021 (IL-17A/A-F inhibitor), and ZB022 (TYK2 inhibitor) in the designated territories. The transaction carries a total potential value of up to approximately USD 2.095 billion, including a USD 35 million upfront payment and multiple development, regulatory, and commercialization milestones, along with tiered royalties. Orelabrutinib has advanced into global Phase III trials for multiple sclerosis (MS), while ZB021 and ZB022 remain at the preclinical stage. Together, the three assets cover key autoimmune targets including BTK, IL-17, and TYK2. This transaction leverages a mature asset to anchor early-stage pipeline out-licensing, enabling multi-target, system-level output in the autoimmune space and highlighting the growing organizational depth of Chinese biotechs in chronic autoimmune disease pipelines.

创新药企业如何把握 BD 风口?

How Can Innovative Drug Companies Seize the BD Opportunity?

回顾 2025，我们见证了中国Biotech正在成为全球医药创新的“发动机”，展望未来，将进一步从“量的爆发”转向“质的深耕”。

Looking back at 2025, we witnessed Chinese Biotech becoming the "engine" of global pharmaceutical innovation. Looking ahead, the focus will shift further from a "quantitative explosion" to a "quality deep dive."

未来的BD战场，将不再仅仅是科学发现的竞争，更是数据治理能力与国际信用体系的竞争。随着地缘政治博弈的常态化与全球监管标准的趋同，MNC的合作逻辑正在发生质的改变：他们不再仅仅寻找一个亮眼的FIC分子，而是在筛选一个能够长期交付高质量数据、具备国际合规视野的“体系化伙伴”。

The future BD battlefield will no longer be merely a competition of scientific discovery but a competition of data governance capabilities and the international credit system. With the normalization of geopolitical games and the convergence of global regulatory standards, the cooperation logic of MNCs is undergoing a qualitative change: they are no longer just seeking an impressive FIC molecule, but are screening for a "systematic partner" capable of long-term delivery of high-quality data and possessing an international compliance perspective.

在这一新周期下，以 ideals 为代表的VDR解决方案提供商，正在从单纯的交易工具演变为连接中国创新与全球资本的“信任基础设施”。

In this new cycle, data platforms represented by ideals are transforming from mere transaction tools into the "trust infrastructure" connecting Chinese innovation with global capital.

行业普遍推崇的Always-on策略，本质上是一种 “以终为始”的战略定，这不仅仅是为了应对单次尽调，而是要求企业将数据资产打磨成全球流通的“硬通货”。当企业的数据室能够随时以FDA标准向世界敞开时，其构建的不仅是交易的底座，更是穿越行业周期的护城河。

The widely promoted always-on strategy in the industry is, in essence, a strategic commitment to "start with the end in mind." This is not just about coping with a single due diligence process but requires companies to polish their data assets into "hard currency" for global circulation. When a company's data room can open its doors to the world at any time according to FDA standards, it is building not only the foundation for transactions but also a moat that can withstand industry cycles.

风起于青萍之末，未来的风口，终将属于那些不仅打磨好了利剑（产品），更精心铸造了剑鞘（体系）的长期主义者。对于中国创新药企而言，善用ideals 等专业工具搭建合规基建，将是以最从容的姿态锁定全球生态位的关键一跃。

As the Chinese saying goes, "From the tip of a blade of grass, a wind begins to rise," which holds that great events stem from minute origins. The future will belong to the long-term strategists who have not only honed their sharp sword (product) but also carefully crafted its sheath (system). For Chinese innovative drug companies, skillfully using professional tools like ideals to build compliance infrastructure will be the critical leap to confidently secure their position in the global ecosystem.

▶ 参考文献

Reference

[1]FDAWarningLettersDatabase,U.S.FoodandDrugAdministration,2023.www.fda.gov

[2]NMPA（国家药监局）2023 年度药品审评报告,国家药品监督管理局.www.nmpa.gov.cn

[3] Ideals 平台官方资料,2024.www.ideals vdr.com

[4]普华永道中国药企数据安全与合规调查报告,PwC,2024.

[5]德勤中国医药行业并购趋势报告 2024,Deloitte.

[6]麦肯锡中国医药市场研究报告,McKinsey&Company,2023.